

AMENDMENTS TO THE CLAIMS

1-38. (canceled)

39. (original) A method for delivering at least a first and second source chemical into a deposition chamber, comprising:

conveying the first source chemical by a first line to a plurality of first holes in communication with the chamber; and

conveying the second source chemical by a second line to a plurality of second holes in communication with the chamber.

40. (original) The method of claim 39, conveying the first and second source chemicals includes respectively the use of first and second flow regulators, wherein the first and second flow regulators are respectively proximate to the first and second holes.

41. (original) The method of claim 40, wherein either the first or second flow regulators comprises a device selected from the group consisting of a valve, pump, or flow controller.

42. (original) The method of claim 40, wherein the chamber includes a shower head for housing the first and second flow regulators devices and the first and second lines.

43. (original) The method of claim 39, wherein the first and second holes are located in an area on the chamber, and wherein the first and second holes are evenly distributed about the area.

44. (original) The method of claim 43, further comprising a shower head, and wherein the area is located on the shower head.

45. (original) The method of claim 40, wherein either first or second flow regulators vaporizes either the first or second source chemicals.

46. (original) The method of claim 40, ifirther comprising controlling the first and second flow regulators to control the flow of the first and second source chemicals to the chamber.

47. (original) The method of claim 46, wherein each of the first and second flow regulators is controlled independently.

48. (original) The method of claim 46, wherein the first flow regulators are controlled in unison, and the second flow regulators are controlled in unison.

49. (original) The method of claim 39, further comprising vaporizer the either the first or second source chemicals respectively in the first line or the second line.

50. (original) The method of claim 39, further comprising controlling the flow of either the first or second source chemical respectively in the first line or the second line.

51. (original) The method of claim 46, wherein controlling the first and second flow regulators comprises activating the first flow regulators to convey the first source chemical into the chamber, and then activating the second flow regulators to convey the second source chemical into the chamber.

52. (original) The method of claim 46, wherein controlling the first and second flow regulators comprises simultaneously activating the first and second flow regulators to convey the first and second source chemicals into the chamber.

53. (original) The method of claim 46, wherein controlling the first and second flow regulators comprises activation of a piezoelectric actuator.

54. (original) A method of depositing a film on a work piece in a deposition chamber, wherein the deposition chamber comprises a plurality of first holes in communication with a first source chemical and a plurality of second holes in communication with a second source chemical, the method comprising:

(a) conveying the first source chemical through the first holes and into the chamber for a first period of time;

(b) conveying the second source chemical through the second holes and into the chamber for a second period of time after the first period of time; and repeating steps (a) and (b) to complete deposition of the film.

55. (original) The method of claim 54, wherein conveying the first and second chemicals comprises respectively activating first flow regulators proximate to the first holes and second flow regulators proximate to the second holes.

56. (original) The method of claim 54, wherein the first and second holes are located on a shower head coupled to the deposition chamber.

57. (original) The method of claim 54, wherein either the first or second flow regulators comprises a device selected from the group consisting of a valve, pump, or flow controller.

58. (original) The method of claim 54, further comprising:
purging the first source chemical from the chamber after step (a); and purging the second source chemical from the chamber after step (b).

59. (original) The method of claim 54, wherein the first source chemical comprises titanium, and wherein the second source chemical comprises nitride.

60. (original) The method of claim 54, wherein the deposition chamber comprises a plurality of third holes in communication with a third source chemical, and wherein the method further comprises, after step (b):

(c) conveying the third source chemical through the third holes and into the chamber for a third period of time after the second period of time; and
repeating steps (a), (b), and (c) to complete deposition of the film.

61. (original) The method of claim 60, further comprising:
purging the first source chemical from the chamber after step (a);
purging the second source chemical from the chamber after step (b); and purging the third source chemical from the chamber after step (c).

62. (original) The method of claim 60, wherein the first, second, or third source chemicals contain an element selected from the group of titanium, barium, or strontium.

63. (original) The method of claim 60, wherein the film is a BST oxide.

64. (original) The method of claim 60, further comprising conveying an oxidizer to the chamber after step (c).